

VERIZON WIRELESS - "Wild Turkey" (CROSS PROPERTY) TIER III  
PERSONAL WIRELESS SERVICE FACILITY

Project Description /Request:

Cellco Partnership, operating as Verizon Wireless ("Verizon"), respectfully requests approval of a Special Use Permit and Special Exemption for a Personal Wireless Service Facility (PWSF), with a 116.7-foot tall monopole to be located at the nearest current address of 426 Wild Turkey Lane, and identified as Tax Map & Parcel Number 05700-00-00-041L0 (the "Property"). Verizon's proposed radio transmitter cabinet will be placed on a concrete pad, beside an approximately 10' wide utility H-frame stand for other power and communications components on a steel grated platform, and an emergency back-up power generator on another concrete pad. This facility will be installed within a 900 square-foot fenced compound platform covered with an ice guard to prevent possible damage to the ground equipment due to falling tree branches and ice. The monopole, antennas, and base station equipment that might be visible above the screening fence will all be painted with Sherwin Williams Java Brown - #6090, which is a matte enamel color that has been previously approved as an appropriate color for many other "Treetop" Personal Wireless Service Facility sites throughout Albemarle County.

Network Objectives:

Verizon is licensed by the Federal Communications Commission (FCC) to provide state-of-the-art wireless telecommunications services within Albemarle County using a combination of four (4) separate bands on the frequency spectrum. These consist of the 850 MHz band for Cellular (CDMA), the 1900 MHz frequency band for Personal Communications Services (PCS), the 4G Long Term Evolution (LTE) on 700 MHz band and Advance Wireless Services (AWS) on the 2100 MHz band. The network offers data upload and download transmission speeds that much faster than the previous generations of wireless technologies. Verizon has also recently added high-definition calling capabilities to the data networks in the form of Voice Over LTE (VOLTE) service

Whenever possible, it is Verizon's goal to provide seamless in-building, in-car and on-street coverage and the full range of voice and data services to existing and future customers. Verizon has determined that the area surrounding this proposed site needs expanded coverage to better serve the nearby residences and businesses. Therefore, this site is intended to provide infill coverage while also adding additional network capacity by offloading traffic from the company's nearest existing sites in all directions. Although the proposed 116.7' monopole tower would not be the ideal height for maximizing coverage, it should allow the antennas to clear the highest treetops within the immediate area on this parcel allowing service from this facility to connect with the customers who are currently drawing on the marginal coverage levels that are currently being provided by the four (4) nearest, neighboring sites: "I64 East" to the Southeast (VZW PWSF off Dry Bridge Road), "Railroad Ave" to the Northwest (Colocation on Existing Rooftop in Crozet), "Turner Mtn Road" to the Northeast (VZW PWSF off of Tillman Road), and Yancey Mills to the Southwest (VZW PWSF off Patterson Mill Road adjacent to I-64).

Character of the Area:

The proposed PWSF will be contained within a 900 square-foot lease area located on this currently vacant parcel, to the north of an existing dwelling and a business that are both located on adjacent parcels that share common ownership with the Property. The site of this facility has a ground level elevation of 667.3 feet. Above Mean Sea Level (AMSL). This parcel, which is currently vacant other than two existing PWSF's—one operated by AT&T and one operated by Shentel—contains 6.00 acres located off Rockfish Gap Turnpike (Route 250) that is zoned Rural Areas (RA) and located within Entrance Corridor (EC) Overlay District and in the White Hall Magisterial District. All adjoining properties are zoned RA, while other nearby properties to the north and northwest are zoned R1 Residential (R1) and along with planned future densities in the Crozet area are

contributing factors to the need for additional network capacity. Access to the proposed PWSF will be provided from the southern side of Rockfish Gap Turnpike (US Route 250) by way of Wild Turkey Lane. The proposed monopole will be located approximately 285 feet north of the nearest boundary line with the right-of-way for Rockfish Gap Turnpike. The nearest off-site dwelling is located approximately 300 feet southwest of the monopole site on property identified as Tax Map / Parcel Number 05400-00-00-04150

Compliance with Section 5.1.40 of the Albemarle County Zoning Ordinance  
Section 5.1.40(b) - Development Requirements for Tier III Personal Wireless Service Facilities (Items 1 - 12):

1. General design: The facility shall be designed, installed and maintained as follows.
  - (a) Guy wires: The proposed monopole will not require any installation of guy wires.
  - (b) Outdoor lighting: One LED Floodlight will be placed on the utility H-frame and these lights will only be used as needed during unexpected events that require nighttime visits by Verizon's technical operations staff. The proposed light must be adjustable to illuminate various parts of the compound for safety reasons. However, it will not be turned on nightly and will be located well below the tree tops which will provide natural shielding from the light shining skyward during any relatively short periods of emergency maintenance.
  - (c) Ground equipment: Proposed equipment consisting of the base station cabinets, H-frame stand and generator will be placed in a location that is screened from off-site views by the surrounding trees, and a wooden fence will also be installed to help fortify the existing screening elements that is offered to this site. Any portions of equipment that are visible above the screening fence will be painted to match the tower and blend into the wooded area.
  - (d) Whip antenna: No whip antennas are currently proposed with this application.
  - (e) Grounding rod: The proposed grounding rod to be mounted at the top of this monopole will comply with the County's sizing requirements for a maximum of 2 feet in length and 1-inch in diameter.
2. Antennas and associated equipment.
  - (a) Number of arrays: Verizon will use a mounting collar and mounting frames that will allow all six (6) of the necessary antennas to be installed in a single array within three (3) horizontally separated sectors at the same height. This antenna array will be centerline mounted at the 113-foot AGL level (780' AMSL), with two (2) antennas grouped in each sector to support the combination of the licensed Cellular, PCS, LTE and AWS frequencies all at one mounting level on the monopole. Other supporting devices that consist of six (6) remote radio heads and two (2) fiber optics surge protection boxes will be placed below the antenna array at heights that are not expected to be visible from the adjacent properties or any distant off-site views.
  - (b) Size: The antennas initially to be installed in Verizon's array are identified as Commscope Model Number: NHH-65C-R2B [96.0"(H) x 11.9"(W) x 7.1"(D), equaling 1,142.40 square inches]. Specific equipment will likely change over the life of the PWSF as technology advances.
  - (c) Projection: The antennas are proposed to be mounted with 18" between the face of the monopole and the backs of the antennas, and no need for physical down-tilting. Therefore, Verizon is also requesting approval of a Special Exception to modify Section 5.1.40.b(2)(c) of the Zoning Ordinance which allows maximum distances of 12" to 18" between the face of the monopole and the back of the antennas when down-tilting is employed.
  - (d) Color: All antennas will be painted the same Java Brown color as the proposed monopole.
3. Tree conservation plan; content.

The locations of proposed tree protection fencing are shown on the Erosion & Sediment Control & Grading Plan Sheet ES-1. Prior to the approval of a building permit, Verizon will also provide a tree conservation plan that has been

prepared by a Certified Arborist. As standard practice, the designated arborist has not issued written conservation plan letters until after they have had the chance to review Verizon's Final Construction Drawings / Site Plan and visit the site. The final issued letters often provide recommendations for any post-construction tree care techniques in addition to granting approval for all proposed land disturbance techniques, vegetation protection fencing locations, and other design elements that might affect the health of trees that surround this site.

**4. Creation of slopes steeper than 2:1.**

Upon the completion of this project, none of the remaining slopes will be greater than 2:1 as a result of construction and land disturbing activities for the proposed facility.

**5. Ground equipment shelter; fencing.**

Verizon is proposing the installation of a 8-foot high wooden stockade fence in order to prevent trespassing, while also providing additional screening the from nearby properties during the fall and winter. The location and design details of the proposed screening fence are provided in the construction drawings / site plan being submitted with this application.

**6. Screening and siting to minimize visibility.**

Although the facility will be located twenty-eight (28) feet five (5) inches from the right-of-way line for Rockfish Gap Turnpike (Route 250), there are mature trees along the north property line that will screen views of the monopole from Route 250 and the adjacent properties to the north. Mature trees on the property will screen the tower from the neighboring property to the west, and VZW will be adding screening trees along the west property lines. Two trees southeast of the proposed site will be removed in order to install the PWSF and related access. Based on the results of the balloon test conducted on January 16, 2020, the site shall be adequately screened and sited to minimize visibility along Route 250, which is both an Entrance Corridor and state-designated Scenic Byway. Views of the top of the facility are expected to be visible from only a few locations at a distance.

**7. Open space plan resources.**

Aside from the fact that this site in the Entrance Corridor Overlay District, which requires the need for Architectural Review Board approval, Verizon has identified no other open space, natural, man-made or other specifically identified resources that would be adversely impacted by approval of this application.

**8. Horizontal separation of multiple facilities.**

The proposed PWSF will be only the 3<sup>rd</sup> facility located on the property and will meet the two hundred (200) foot radius required for horizontal separation of multiple facilities.

**9. Diameter of monopole.**

As indicated in the attached construction drawings, Verizon's proposed monopole will be designed and constructed so that it is 30 inches at its base and tapers to 18 inches at its top.

**10. Height of monopole.**

At 116.7 feet tall (784 feet Above Mean Sea Level - AMSL), the proposed monopole will be approximately 10 feet above the top elevation of the reference tree, which is identified as a 24" diameter oak that is 113 feet tall (774 feet AMSL), and has a drip line that is 25 feet south of where the monopole will be installed.

**11. Color of monopole, antennas, and equipment.**

The monopole and all antennas will be painted Sherwin Williams Java Brown #6090, a color that has been applied

to previously approved Tier II and treetop PWSF monopoles in Albemarle County. All of the base station equipment that is installed to support this facility will also be painted the same color and enclosed within a wooden screening and security fence as well.

**12. Placement of cables, wires and similar attachments.**

The proposed monopole will be designed and constructed to contain all of Verizon Wireless's coaxial and fiber optic cables that will run from the ground equipment to all antennas and their supporting devices.

**Section 5.1.40(c) - Applicability of other regulations in this chapter (Items 1-6):**

**1. Building site exemption.**

Verizon acknowledges this exemption from the standard building site requirements for Personal Wireless Service Facilities.

**2. Vehicular access.**

Verizon will utilize the current paved existing access (Wild Turkey Lane) off of Rockfish Gap Turnpike (Route 250) and no improvements will be required at this time.

**3. Setbacks.**

Verizon has selected a location for this proposed monopole that is approximately 136 feet (116% of its height) away from the nearest boundary line to the west, 186 feet 1 inch to the western property line and 1178 feet 9 inches to the southern property line. These setbacks exceed the minimum required setback distance for towers and similar structures, which is equal to 100% of the monopole's height from the parcel lines shared with adjoining parcels. The distance to the right-of-way for Rockfish Gap Turnpike (Route 250) is approximately 28 feet 5 inches.

**4. Area, bulk, and minimum yards.**

Verizon acknowledges this exemption that allows relief to Personal Wireless Service Facilities from the standard area, bulk and minimum yard requirements.

**5. Required yards.**

Verizon acknowledges this exemption that allows relief to Personal Wireless Service Facilities from the required yard standards.

**6. Site plan.**

Please refer to the attached construction drawings with site plan details and the specification sheets for proposed antennas and equipment that all demonstrate compliance with the Tier III PWSF criteria, set forth in Section 5.1.40(a)(4) - Plans and Supporting Documents. Any other supporting information that is deemed relevant to the requirements set forth in Section 32 of the zoning ordinance for site plans can be submitted upon request.

**Compliance with Section 33.40 of the Albemarle County Zoning Ordinance  
Section 33.40(B) – Factors to be Considered for Special Use Permits.**

**In acting on a special use permit, the Board shall consider the following factors, provided that the Board is not required to make specific findings in support of its actions.**

1. **No substantial detriment:** This proposal meets all the design criteria for a Tier II PWSF currently required by section 5.1.40 of the Albemarle County Zoning Ordinance. The property is screened by

Verizon PWSF (Wild Turkey – Cross Property)

a large buffer of mature trees that will screen the facility from views from adjacent properties and Route 250. The PWSF is unmanned (no water and sewer) and only requires monthly trips by a technician to maintain the facility. Lastly, the PWSF will not require any lighting on the structure or emit noise or odors which would affect any adjacent property owners' quiet enjoyment of their property.

2. Character of the nearby area is unchanged: The area surrounding this facility is a mix of rural residential with large unimproved parcels being used for agricultural purposes, and single family residential units. Only one mature tree on the property is scheduled to be removed by the installation of this PWSF and its removal will not affect any views from adjacent properties as an already existing mature buffer currently exists. A mature tree buffer along Rockfish Gap Turnpike (Route 250) will remain unchanged and therefore the PWSF will be adequately screened from view for those traveling along the road.
3. Harmony: The RA (Rural Area) district was established to preserve agricultural and forestal land activities, water supply protection and conservation of natural, scenic, and historic resources. Per Section 10.2.1 – By right uses allowed include residential, commercial and outdoor uses including Tier I and Tier II PWSF (10.2.1(22)). The proposed Facility meets the design criteria of a Tier II facility, except the property is located within 200' of a state-designated Scenic Byway and therefore is within a defined "Avoidance Area," causing it not to meet the definition of a Tier II PWSF. A mature tree buffer along Rockfish Gap Turnpike (Route 250) will adequately screen the facility from the view of travelers along the Scenic Byway. In addition, the facility will increase access to public safety as demand and usage of the network has grown due to additional residential developments in the area.
4. Consistency with the Comprehensive Plan: Per the adopted Albemarle County 2015 Comprehensive Plan a Virginia Byway is an existing road with high aesthetic or cultural value leading to or lying within an area of historic, natural, or recreational significance. Rockfish Gap Turnpike (Route 250) is one such designated byway located in Albemarle County. The designation does not place restrictions upon properties located along the Byway, but the Zoning Ordinance provides by definition that a facility that would otherwise be classified as a Tier II PWSF will be classified as a Tier III PWSF requiring a special use permit. The PWSF meets the design criteria for a Tier II facility required by the Albemarle County Zoning Ordinance and the mature tree buffer located along the property line will further screen the PWSF view from passing vehicles. Therefore, the proposed PWSF is consistent with the current comprehensive plan.

Conclusion:

Approval of this PWSF application will contribute to the expansion of Verizon's coverage to the rural areas, existing and future residents and businesses in the nearby planned developments, as well as travelers on two major roadways (I-64 and US 250). This facility will also help to reinforce network capacity and relieve some of the high levels of traffic that has been experienced at Verizon's existing neighbor facilities due to the increased demands for service in the nearby rapidly-growing development area.

Installation of this PWSF will improve wireless coverage within an area of the county that experiences high levels of network traffic but is currently underserved, especially during times when network traffic peaks. The monopole tower serving this PWSF will meet the County's design preference for monopoles that extend just above the treetops with dark brown finishes and well-screened base station compounds. Therefore, Verizon is confident

that the proposed Personal Wireless Service Facility will meet the design criteria necessary for approval of a Tier III facility, and that it does not conflict with any of the goals and objectives set forth in the Albemarle County Comprehensive Plan.

Sincerely,



Nathan Holland

GDN/sites

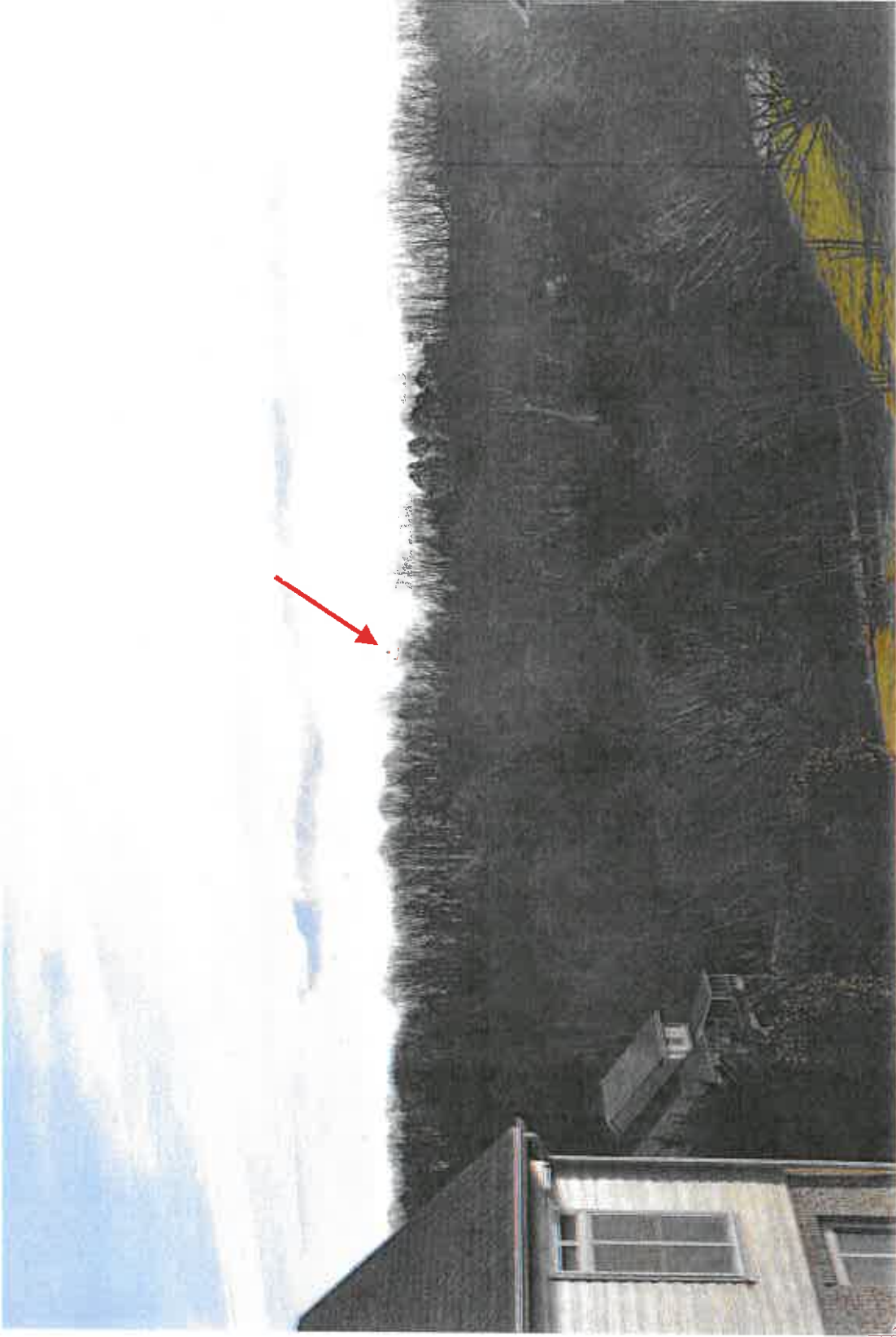
Site Development Consultants to Verizon



Verizon – Wild Turkey (Cross Property) – Balloon Test Photos



Verizon – Wild Turkey (Cross Property) – Balloon Test Photos





Verizon – Wild Turkey (Cross Property) – Balloon Test Photos

